



U.S. Department of Energy
Office of Civilian Radioactive Waste Management



Session TB 1: Spent Fuel Management OCRWM Program Update

Presentation to:
**Nuclear Regulatory Commission
Regulatory Information Conference 2005**

Presented by:
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Mission and Priorities

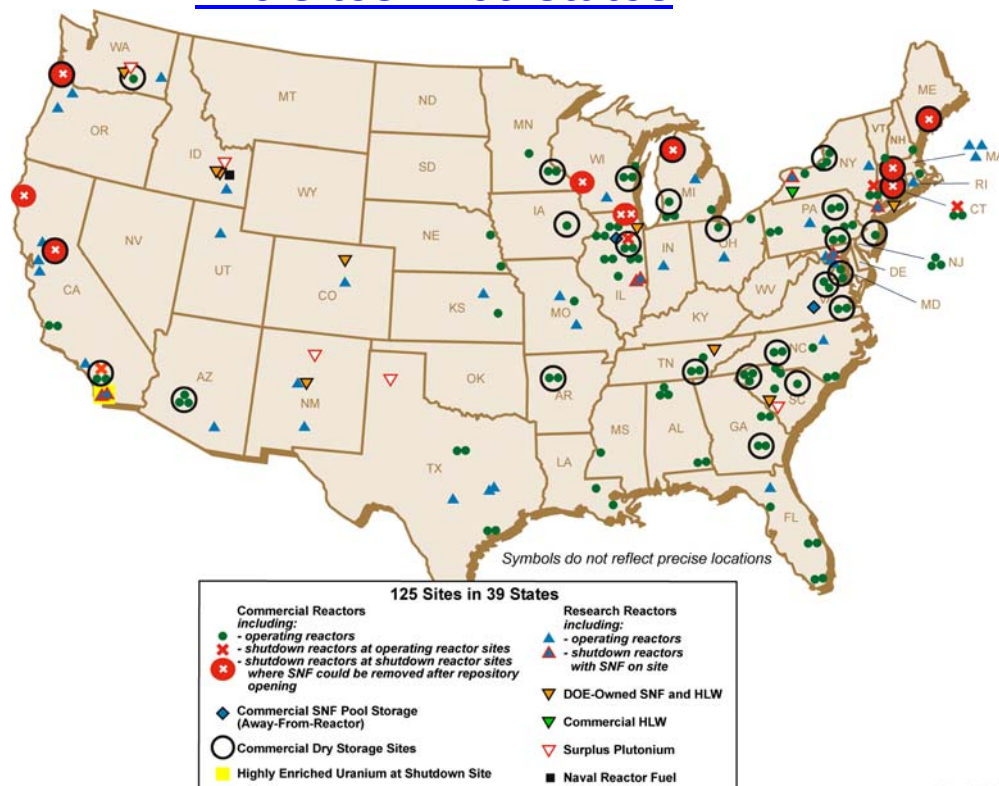
- **Mission:** Our mission is to **manage and dispose** of high-level radioactive waste and spent nuclear fuel in a manner that **protects health, safety, and the environment; enhances national and energy security; and merits public confidence.**

- **Priorities:**

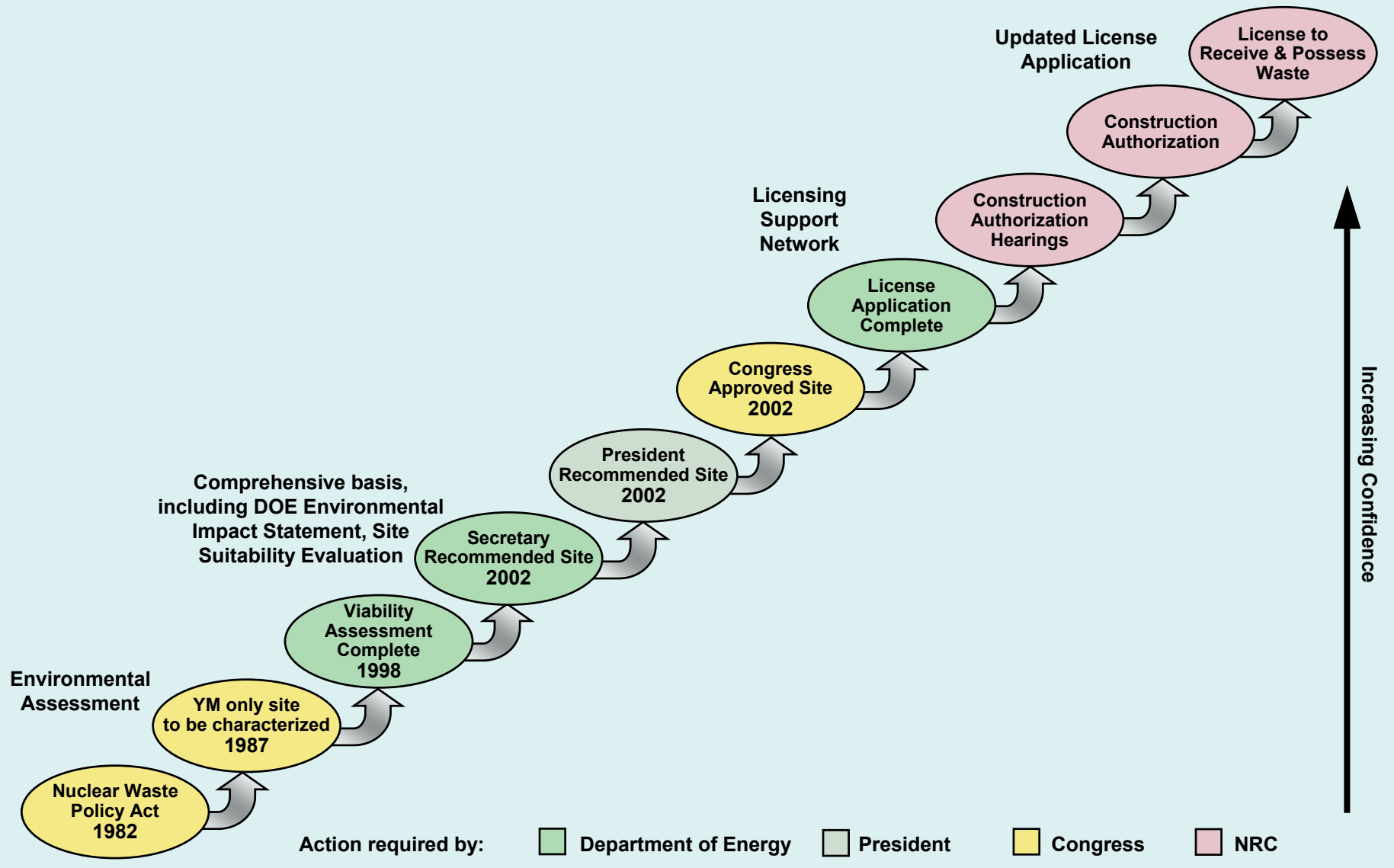
- After 20 years and \$7 billion of scientific study, Congress **passed a joint resolution** to designate the Yucca Mountain site for repository development and enable DOE to move ahead to submit a license application for repository construction authorization.
- Protecting public health, safety, and the environment remain our top priorities.

Current locations of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) destined for geologic disposal:

125 sites in 39 states

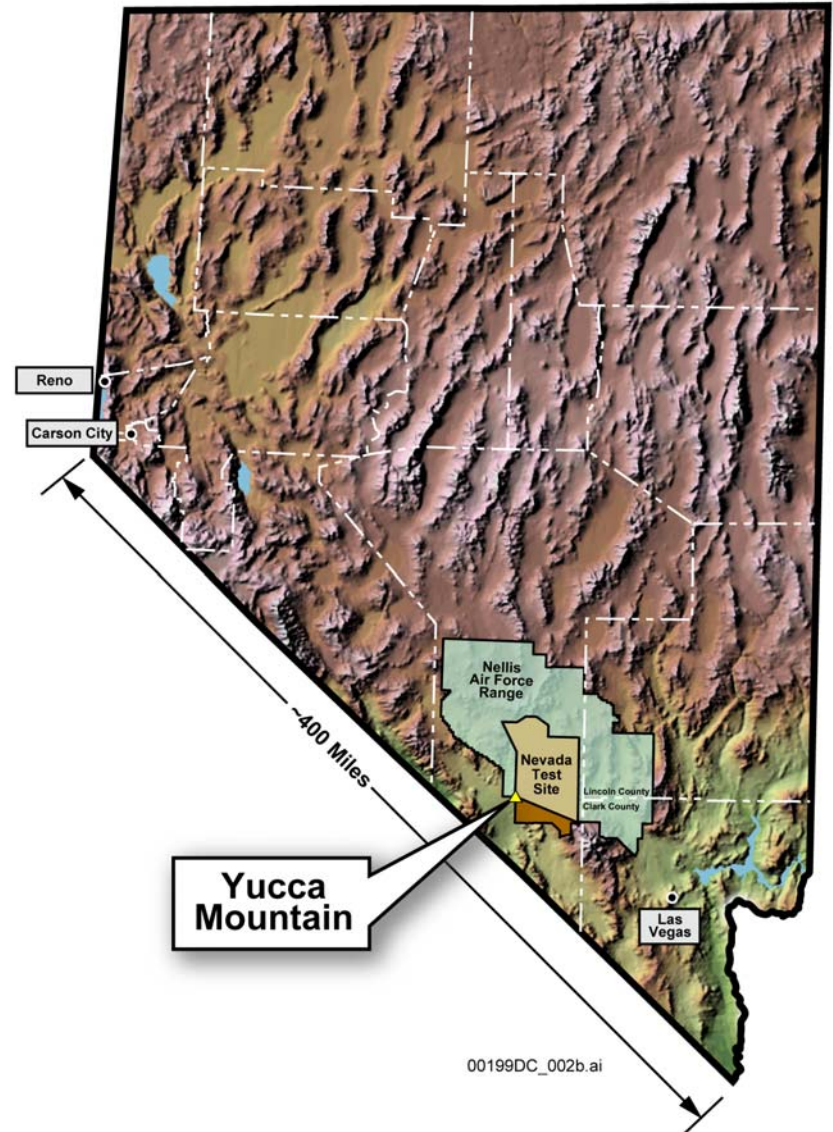


Repository Progress

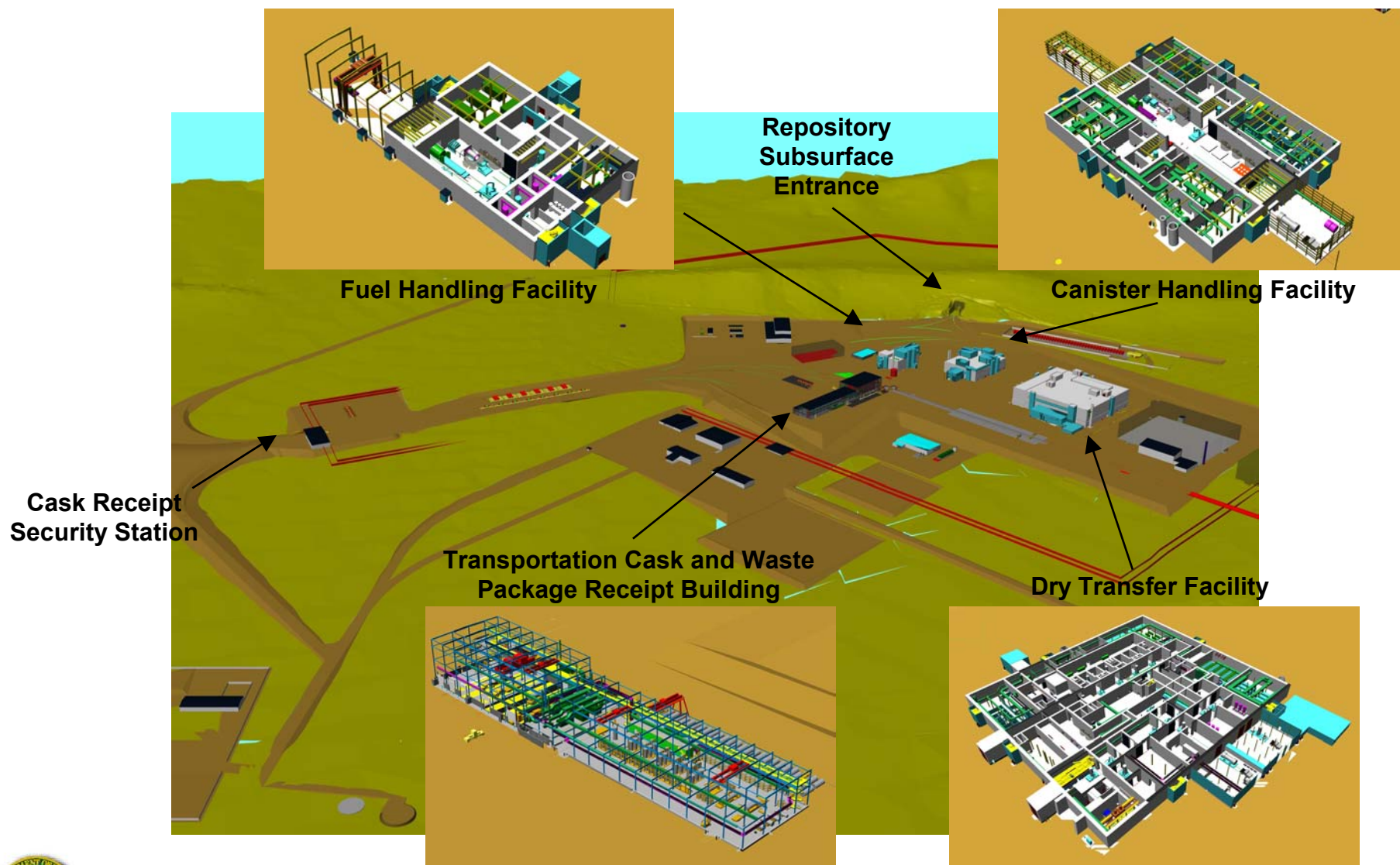


Location of Yucca Mountain, Nevada

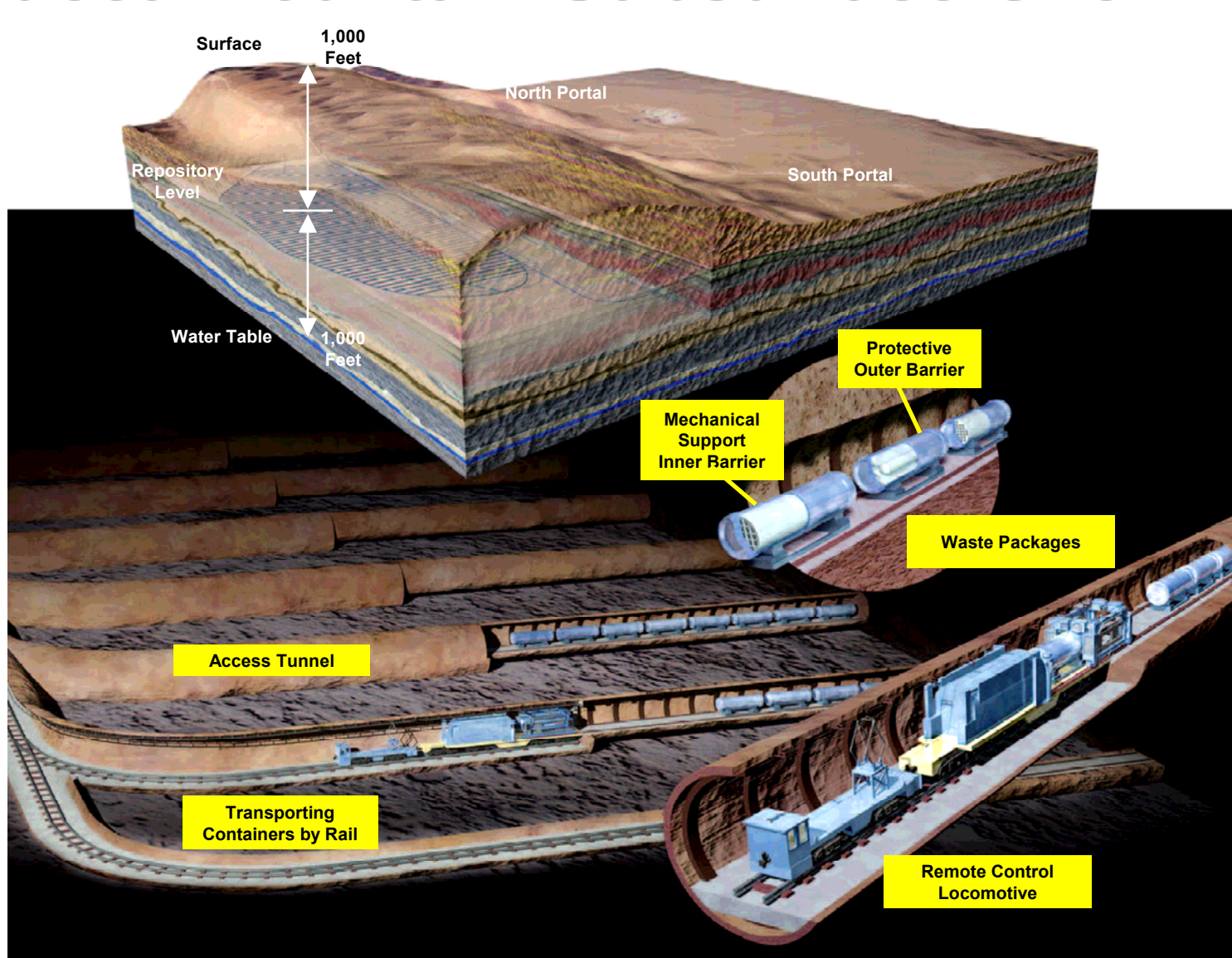
- Located in an arid region of the desert southwest, far from major population centers
- 100 miles northwest of Las Vegas in Nye County
- On western boundary of the Nevada Test Site, a DOE facility



Yucca Mountain Surface Overview



Yucca Mountain Subsurface Overview



Program Status

- **Significant progress in preparation of License Application and restart of transportation program**
- **High momentum over past couple years**
- **Significant issue in stability of long-term budget**
- **D.C. Court of Appeals ruling on Environmental Protection Agency (EPA) radiation protection standard**



Recent Progress

- **In August 2004, DOE submitted information on the last 17 out of 293 Key Technical Issue agreements (KTIs) to the Nuclear Regulatory Commission**
 - All 293 KTIs have now been addressed by DOE
 - NRC has closed 221 of the agreements and is reviewing the rest
 - Any NRC questions or concerns will be addressed as part of the licensing proceeding
- **DOE completed a project-wide Safety Conscious Work Environment survey in October**
 - 65% response rate
 - Results are being analyzed
- **Significant improvements in quality assurance implementation:**
 - Closing the last of several longstanding Corrective Action Reports
 - Resolving NRC comments to Revision 17 of the Quality Assurance Requirements Document
 - Increased self identification of issues and improved Corrective Action Program
 - Developing additional QA plans for transportation and other program activities
- **We completed a draft License Application in July 2004, and a second draft in November 2004**



Status of the License Application

- **DOE is evaluating the draft License Application:**
 - Science and design work for the LA is technically sound and supports robust safety analyses for the preclosure (operational) period through 10,000 years after permanent closure
 - We have thoroughly cross-referenced this work against the requirements in 10 CFR Part 63 and the guidance in the Yucca Mountain Review Plan
 - We are using available time to refine the treatment of uncertainty
- **Additionally, DOE is proceeding with the Licensing Support Network (LSN) certification by mid-summer.**
- **We are preparing to address potential changes due to the ruling on the EPA standard by the U.S. Court of Appeals**
- **DOE is revising the original goal of delivering the License Application at the end of December 2004; we anticipate completing the License Application by the end of 2005**



Licensing Support Network

- DOE submitted its certification of the Licensing Support Network in June 2004
- After a challenge by the State of Nevada, the NRC Atomic Safety and Licensing Board's Pre-License Application Presiding Officer Panel issued its ruling striking DOE's certification of its Licensing Support Network documents
- DOE has been working to accommodate the direction of the Board and processing documents
- DOE will do the work necessary to certify the Licensing Support Network
- We anticipate certifying in mid-summer



Summary



- We have made significant progress toward completing the license application
- Radiation protection standard is being revised by EPA
- DOE is addressing work required for Licensing Support Network Certification
- We are committed to the safe disposal of U.S. spent nuclear fuel and high-level radioactive waste

